

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

June 8, 2010

Patrick J. Welch, Chief Financial Officer Atlantic Power Corporation. 200 Clarendon Street, Floor 25 Boston, MA 02116

Re: Atlantic Power Corporation

Amendment No. 1 to Registration Statement on Form 10-12B

Filed May 27, 2010

Form 10-Q for Fiscal Quarter Ended March 31, 2010

Filed May 14, 2010 File No. 001-24691

Dear Mr. Welch:

We have reviewed your filings and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filings, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filings and the information you provide in response to these comments, we may have additional comments.

General

1. We reviewed your response to comment 2 in our letter dated May 12, 2010 and the related revisions to your disclosures. We note that in your Form 10-Q for the quarterly period ending March 31, 2010 on pages 40 and 42, you continue to disclose that, "[b]ased on [your] latest projections, [you] believe that [your] cash on hand and projected cash flows are adequate to meet the current level of dividends to shareholders into 2015." To the extent you continue to disclose this type of information, we believe you need to disclose qualitative and quantitative information in support of your assertion. Please advise or revise.

Business, page 3

2. We note your response to comment five of our letter dated May 12, 2010. Please resubmit your materials and either mark your furnished support or provide page references in your response to the sections you rely upon for each specific statement.

Selkirk Project, page 22

3. We note your response to comment eight of our letter dated May 12, 2010. Please revise your disclosures to provide the actual terms that determine the partnership's cash distribution. For example, with regard to the 13.62% priority distribution please provide the fixed semiannual amount.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 45

Cash Flow Available for Distribution, page 66

4. Please tell us how your disclosure of cash available for distribution on a per share basis complies with Item 10(e) of Regulation S-K. Refer to the adopting release for Item 10(e) of Regulation S-K, Exchange Act Release No. 47226, Accounting Series Release No. 142, ASC 230 and Question 102.05 of the Division of Corporation Finance's Compliance and Disclosure Interpretations for Non-GAAP Financial Measures.

Elements of Compensation, page 84

- 5. We note your responses to comments 26 and 28 of our letter dated May 12, 2010. Please revise your disclosure to provide more detail regarding how you arrived at the amount of compensation paid to each named executive officer under the non-equity incentive plan. Specifically, according to the disclosure you provide on page 84, the second component of your annual cash awards would provide for a maximum pay-out of 110% of each senior executive's salary if a total shareholder return is achieved at greater than the 85th percentile. According to the disclosure you provide on page 85, your total shareholder return for 2009 was achieved at a level (89% percentile) that would provide for the maximum award to be granted and yet the amounts reflected in the non-equity incentive plan compensation column of the summary compensation table reflect amounts far less than a maximum award. Please revise or advise.
- 6. Also, please explain how the third component you discuss on page 84 was arrived at with respect to each senior executive. Your disclosure in each senior

executive's compensation summary, starting on page 89, indicates that this component is "based on the independent directors' assessment of [each officer's] performance against annually approved goals and objective." Please revise to briefly summarize the individual goals and objectives that are established annually for each senior executive.

7. We note your response to comment 27 of our letter dated May 12, 2010 and the revised disclosure you provided on page 85 that discusses the process your CEO and Compensation Committee engage in to determine the amount of non-equity incentive plan compensation that is awarded to your non-officer executives. Please also discuss whether these amounts are based upon the performance of the company or the individual or both, and whether any goals or objectives are established at the start of the fiscal year that will determine how the amount of compensation is arrived at. Again, your disclosure in both non-officer compensation summaries, starting on page 91, indicates that these amounts are based upon "contributions to achievement of [y]our annual goals and objectives approved by [y]our board of directors in January 2009." Please also disclose the fixed percentage of salary that determines the amounts of these awards.

Long Term Incentive Plan, page 85

- 8. We note your response to comment 29 of our letter dated May 12, 2010 and your revised disclosure indicating that Mercer's benchmarking review concluded that the overall compensation plan, including the LTIP plan and other components, was reasonable and appropriate. Please revise to elaborate upon how they determined that your overall compensation plan "was reasonable and appropriate." In other words, please identify the benchmark and its components, pursuant to Item 402(b)(2)(xiv), and whether, in determining that your overall compensation plan was reasonable and appropriate, they assessed each component of your compensation individually and determined that each component fell within or above a particular percentile of the benchmark; if they arrived at their assessment in some other manner, please elaborate.
- 9. We note your response to comment 30 of our letter dated May 12, 2010 and your revised disclosure. Please disclose your 2009 cash flow target, your actual performance and for each named executive officer, the actual calculation of their LTIP compensation based on your performance.

Stockholder Matters, page 97

10. In light of your history of paying cash dividends, please disclose whether you currently expect that comparable cash dividends will continue to be paid in the future. Also disclose any uncertainties regarding your ability to continue to pay comparable cash dividends in the future; for example, your ability to pay

dividends in the future is subject to your earnings, cash flows, available cash, the discretion of the Board of Directors, and/or other factors. Refer to Item 201(c)(2) of Regulation S-K. Please also revise your disclosure on page 68 under Common Share Conversion and Dividend Policy to include these disclosures.

Financial Statements, page F-1

Consolidated Statements of Cash Flows, page F-5

11. We reviewed your response to comment 38 in our letter dated May 12, 2010. As it appears there is diversity in practice in terms of the statements of cash flows classification of distributions from equity method investees in excess of equity method earnings, please provide accounting policy disclosure regarding your policy for classifying these cash flows. Please also revise your presentation to show separate line items for equity in earnings from unconsolidated affiliates and distributions from unconsolidated affiliates as we believe ASC 230 requires such gross presentation. Finally, please reconcile for us the amounts disclosed on the face of the statements to the amounts disclosed in note 4 for distributions and equity in earnings from unconsolidated affiliates.

Form 10-Q for Fiscal Quarter Ended March 31, 2010

Part I. Financial Information, page 3

Item 1. Consolidated Financial Statements and Notes, page 3

Note 16. United States and Canadian Accounting Policy Differences, page 23

12. Please tell us whether you are required by Canadian securities legislation to provide a reconciliation from US GAAP to Canadian GAAP. Please also refer to Item 10(e)(5) of Regulation S-K and tell us why you believe the Canadian GAAP amounts are permitted to be disclosed in the notes to the financial statements prepared in accordance with US GAAP. Notwithstanding the preceding, please tell us whether you meet the definition of a foreign private issuer in Rule 405 of Regulation C. Also tell us what you plan to do next year when Canada switches over to IFRS.

Exhibit 32

13. Please amend the filing to include your Section 1350 Certifications. Refer to Item 601(b)(32) of Regulation S-K.

Please contact Adam Phippen, Staff Accountant at (202) 551-3336 or Robyn Manuel, Staff Accountant, at (202) 551-3823 if you have any questions regarding comments on the financial statements and related matters. Please contact Scott Anderegg, at (202) 551-3342, Mara Ransom, Legal Branch Chief, at (202) 551-3264 or me at (202) 551-3720 with any other questions.

Sincerely,

H. Christopher Owings Assistant Director